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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,960	05/22/2006	Masayuki Shimizu	P29023	3087

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GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER
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CADUGAN, ERICA E

ART UNIT	PAPER NUMBER
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3726

NOTIFICATION DATE	DELIVERY MODE
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02/18/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,960	<b>Applicant(s)</b> SHIMIZU ET AL.	
	<b>Examiner</b> Erica E. Cadugan	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, drawn to a “bending apparatus”.

Group II, claim(s) 13, drawn to a “bending method”.

Group III, claim(s) 14-16, drawn to a “bending method”.

Group IV, claim(s) 17-20, drawn to a “bending tool”.

2. The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

3. Regarding Groups I and II, in accordance with the guidance set forth in MPEP section 1850, it has been determined *a posteriori*, i.e., after taking the prior art into consideration, that the features common to all the claims do not constitute “special technical features” since they do not make a “contribution” over the prior art in light of at least WO 00/41824 (WO ‘824), for example.

Specifically, it is noted that the features which are common to all of the claims are as follows:

Regarding Groups I and II, it is noted that the features which are common to all of the claims (of Groups I and II) are as follows: “a bending apparatus which moves one of upper and

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lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables", and the use of split tools based on automatically or manually determined tool layout information.

It is noted that WO '824 is not in the English language. However, U.S. Patent Application Publication 2003/0064871 to Akami et al. is in the same patent family as WO '824, and is being relied upon as an English language equivalent thereto. Thus, any reference to paragraph numbers herein is with respect to the US '871 publication.

Note that WO '824 teaches a bending apparatus in the form of a press brake 1 that is provided with an upper table 5 and a lower table 7 (paragraph 0125, Figure 1), which performs bending on a workpiece with punch tools P attached to the upper table 5 and die tools D attached to the lower table 7 (Figure 1). Note further that the bending arrangement taught by WO '824 utilizes divided or "split" tools P, D (see Figure 1 and paragraph 0126, for example). Note that the tool layouts of the various split tools P, D (such as the layout shown in Figure 1, which includes at least one processing station) is inherently determined either automatically or manually, as those are the only two possible options.

Thus, Groups I and II lack any same or corresponding special technical features.

4. Re Groups I and III, in accordance with the guidance set forth in MPEP section 1850, it has been determined *a posteriori*, i.e., after taking the prior art into consideration, that the features common to all the claims do not constitute "special technical features" since they do not make a "contribution" over the prior art in light of at least WO 00/41824 (WO '824), for example.

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Specifically, it is noted that the features which are common to all of the claims are as follows:

Regarding Groups I and III, it is noted that the features which are common to all of the claims (of Groups I and III) are as follows: "a bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables", and the use of split tools based on automatically or manually determined tool layout information.

It is noted that WO '824 is not in the English language. However, U.S. Patent Application Publication 2003/0064871 to Akami et al. is in the same patent family as WO '824, and is being relied upon as an English language equivalent thereto. Thus, any reference to paragraph numbers herein is with respect to the US '871 publication.

Note that WO '824 teaches a bending apparatus in the form of a press brake 1 that is provided with an upper table 5 and a lower table 7 (paragraph 0125, Figure 1), which performs bending on a workpiece with punch tools P attached to the upper table 5 and die tools D attached to the lower table 7 (Figure 1). Note further that the bending arrangement taught by WO '824 utilizes divided or "split" tools P, D (see Figure 1 and paragraph 0126, for example). Note that the tool layouts of the various split tools P, D (such as the layout shown in Figure 1, which includes at least one processing station) is inherently determined either automatically or manually, as those are the only two possible options.

Thus, Groups I and III lack any same or corresponding special technical features.

5. Re Groups I and IV, in accordance with the guidance set forth in MPEP section 1850, it has been determined *a posteriori*, i.e., after taking the prior art into consideration, that the

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features common to all the claims do not constitute “special technical features” since they do not make a “contribution” over the prior art in light of at least WO 00/41824 (WO ‘824), for example.

Specifically, it is noted that the features which are common to all of the claims are as follows:

Regarding Groups I and IV, it is noted that the features which are common to all of the claims (of Groups I and IV) are as follows: “a bending tool” for use in an “apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables”.

It is noted that WO ‘824 is not in the English language. However, U.S. Patent Application Publication 2003/0064871 to Akami et al. is in the same patent family as WO ‘824, and is being relied upon as an English language equivalent thereto. Thus, any reference to paragraph numbers herein is with respect to the US ‘871 publication.

Note that WO ‘824 teaches a bending apparatus in the form of a press brake 1 that is provided with an upper table 5 and a lower table 7 (paragraph 0125, Figure 1), which performs bending on a workpiece with punch tools P attached to the upper table 5 and die tools D attached to the lower table 7 (Figure 1), i.e., teaches a bending tool P or D for use in a bending apparatus as claimed.

Thus, Groups I and IV lack any same or corresponding special technical features.

6. Re Groups II and III, in accordance with the guidance set forth in MPEP section 1850, it has been determined *a posteriori*, i.e., after taking the prior art into consideration, that the features common to all the claims do not constitute “special technical features” since they do not

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make a “contribution” over the prior art in light of at least WO 00/41824 (WO ‘824), for example.

Specifically, it is noted that the features which are common to all of the claims are as follows:

Regarding Groups II and III, it is noted that the features which are common to all of the claims (of Groups II and III) are as follows: “a bending method in a bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables”, and “forming a process station” with “split tools” based on “automatically or manually determined tool-layout information”.

It is noted that WO ‘824 is not in the English language. However, U.S. Patent Application Publication 2003/0064871 to Akami et al. is in the same patent family as WO ‘824, and is being relied upon as an English language equivalent thereto. Thus, any reference to paragraph numbers herein is with respect to the US ‘871 publication.

Note that WO ‘824 teaches a bending method utilizing a bending apparatus in the form of a press brake 1 that is provided with an upper table 5 and a lower table 7 (paragraph 0125, Figure 1), which performs bending on a workpiece with punch tools P attached to the upper table 5 and die tools D attached to the lower table 7 (Figure 1). Note further that the bending arrangement taught by WO ‘824 utilizes divided or “split” tools P, D (see Figure 1 and paragraph 0126, for example). Note that the tool layouts of the various split tools P, D (such as the layout shown in Figure 1, which includes at least one processing station) is inherently determined either automatically or manually, as those are the only two possible options.

Thus, Groups II and III lack any same or corresponding special technical features.

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7. Re Groups II and IV, in accordance with the guidance set forth in MPEP section 1850, it has been determined *a posteriori*, i.e., after taking the prior art into consideration, that the features common to all the claims do not constitute “special technical features” since they do not make a “contribution” over the prior art in light of at least WO 00/41824 (WO ‘824), for example.

Specifically, it is noted that the features which are common to all of the claims are as follows:

Regarding Groups II and IV, it is noted that the features which are common to all of the claims (of Groups II and IV) are as follows: a bending tool for use in “a bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables”.

It is noted that WO ‘824 is not in the English language. However, U.S. Patent Application Publication 2003/0064871 to Akami et al. is in the same patent family as WO ‘824, and is being relied upon as an English language equivalent thereto. Thus, any reference to paragraph numbers herein is with respect to the US ‘871 publication.

Note that WO ‘824 teaches a bending apparatus in the form of a press brake 1 that is provided with an upper table 5 and a lower table 7 (paragraph 0125, Figure 1), which performs bending on a workpiece with punch-type bending tools P attached to the upper table 5 and die-type bending tools D attached to the lower table 7 (Figure 1).

Thus, Groups II and IV lack any same or corresponding special technical features.

8. Re Groups III and IV, in accordance with the guidance set forth in MPEP section 1850, it has been determined *a posteriori*, i.e., after taking the prior art into consideration, that the



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features common to all the claims do not constitute “special technical features” since they do not make a “contribution” over the prior art in light of at least WO 00/41824 (WO ‘824), for example.

Specifically, it is noted that the features which are common to all of the claims are as follows:

Regarding Groups III and IV, it is noted that the features which are common to all of the claims (of Groups III and IV) are as follows:

a bending tool for use in “a bending apparatus which moves one of upper and lower tables, and performs bending on a workpiece with tools attached to said upper and lower tables”.

It is noted that WO ‘824 is not in the English language. However, U.S. Patent Application Publication 2003/0064871 to Akami et al. is in the same patent family as WO ‘824, and is being relied upon as an English language equivalent thereto. Thus, any reference to paragraph numbers herein is with respect to the US ‘871 publication.

Note that WO ‘824 teaches a bending apparatus in the form of a press brake 1 that is provided with an upper table 5 and a lower table 7 (paragraph 0125, Figure 1), which performs bending on a workpiece with punch-type bending tools P attached to the upper table 5 and die-type bending tools D attached to the lower table 7 (Figure 1).

Thus, Groups III and IV lack any same or corresponding special technical features.

9. **ADDITIONALLY**, if Group I is elected, this application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

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The claimed species are as follows:

A species wherein the process station formation device has a separator that has an arm which is rotatably mounted on an abutment of a back gauge, as set forth in at least claim 9;

A species wherein the process station formation device includes a fork-like separator with a pair of taper claws, as set forth in at least claim 10.

It is noted that there are many other disclosed species, and should claims later be presented to additional species, an additional election of species may be required at that time.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

10. The species of Group I listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: in accordance with the guidance set forth in MPEP section 1850, it has been determined *a posteriori*, i.e., after taking the prior art into consideration, that the features common to all the claims do not constitute “special technical

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features” since they do not make a “contribution” over the prior art in light of at least ?????, for example.

Specifically, it is noted that the features which are common to all of the claims are as follows: the features of claim 1.

It is noted that WO ‘824 is not in the English language. However, U.S. Patent Application Publication 2003/0064871 to Akami et al. is in the same patent family as WO ‘824, and is being relied upon as an English language equivalent thereto. Thus, any reference to paragraph numbers herein is with respect to the US ‘871 publication.

Note that WO ‘824 teaches a bending apparatus in the form of a press brake 1 that is provided with an upper table 5 and a lower table 7 (paragraph 0125, Figure 1), which performs bending on a workpiece with punch-type bending tools P attached to the upper table 5 and die-type bending tools D attached to the lower table 7 (Figure 1).

The apparatus includes a tool-layout information determination device that determines tool-layout based on product information (see at least paragraphs 0219, 0223-0224, 0227, 0230-0232, for example). Additionally, there is a “tool housing device” 65, 123 that houses a tool group including a plurality of divided or split tools P, D (see at least paragraphs 0205-0207, for example). Also, a tool exchanging device 61 serves to exchange tool groups between the aforescribed tool housing device and the upper 5 and lower tables 7 (see paragraph 0207, for example).

Note that the tool exchanging device 61 also serves as a “process-station formation device” that serves to split a tool group transferred from the tool housing device 65, 123 to the upper 5 and lower 7 tables into a plurality of tool groups based on the aforescribed tool-layout

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information, to thereby form a plurality of process stations S1, S2, S3 (see at least Figures 46, 47 -- particularly step S411 in Figure 47; and also Figure 48, particularly noting the Figure 48g and 48h, for example, wherein two punch tools P2 are split or separated from another punch tool P2 at station S2, for example).

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics (i.e., the different configurations of separator described previously). The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

11. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474.

The examiner can normally be reached on Monday-Thursday, 5:30 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erica E Cadugan/  
Primary Examiner  
Art Unit 3726

eec  
February 10, 2010